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TAX ADMINISTRATION

Electronic Filing's Past and Future Impact on Processing Costs Dependent on Several Factors



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Abstract From fiscal years 1997 through 2000, the number of individual business tax returns filed electronically increased from almost 23 to almost 41 million. At the same time, the Internal Revenue Service (IRS) actual expenditures for submission processing (which funds for processing returns filed on paper and electronically) grew about \$795 million in 1997 to about \$924 million in 2000, an increase 16 percent, or 11 percent in inflation-adjusted dollars. 1 Because it less, on average, to process an electronic return compared with a return, a growth in processing costs at the same time electronic filing growing seems contradictory.		
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Abbreviations

GAO	General Accounting Office
IRS	Internal Revenue Service



United States General Accounting Office
Washington, DC 20548

January 10, 2002

The Honorable Amo Houghton
Chairman, Subcommittee on Oversight
Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

From fiscal years 1997 through 2000, the number of individual and business tax returns filed electronically increased from almost 23 million to almost 41 million. At the same time, the Internal Revenue Service's (IRS) actual expenditures for submission processing (which includes funds for processing returns filed on paper and electronically) grew from about \$795 million in 1997 to about \$924 million in 2000, an increase of 16 percent, or 11 percent in inflation-adjusted dollars.¹ Because it costs less, on average, to process an electronic return compared with a paper return, a growth in processing costs at the same time electronic filing is growing seems contradictory.

At your request and as agreed with your office, this report addresses (1) the factors, if any, that limited the impact of electronic filing on the amount of resources (both dollars and staff years) devoted to processing returns and (2) the prospects for future reductions in processing costs as a result of electronic filing.

Results in Brief

Our interviews of IRS officials and our analysis of relevant documentation identified several factors that limited the impact of electronic filing on the resources devoted to processing returns from fiscal years 1997 through 2000. These factors fell into two broad categories, namely,

- filing trends that partially offset the potential savings from increases in electronic filing and
- increased demands on paper processing staff.

¹IRS' submission processing budget for fiscal years 1997 through 2000 did not provide sufficient information to determine the amount of resources IRS spent on processing paper versus electronic returns. We are working with IRS' Office of Cost Accounting to get that information for fiscal years 1997 through 2000. We will send the Subcommittee a separate report summarizing any information we obtain along with any relevant analysis.

Several filing trends limited the impact of electronic filing. Specifically, (1) there was an increase in the overall number of individual and business tax returns filed, and the resources needed to process that increase partially offset the resources saved by processing more electronic returns; (2) the number of the most costly to process individual income tax returns filed on paper essentially stayed the same; and (3) the number of individual income tax returns filed on paper and received during the peak filing period stayed relatively the same, and peak processing needs drive the resources needed to process individual paper returns.

While electronic filing increased, so did the demands placed on paper processing staff. In particular, (1) processing changes, such as expanded efforts to validate Social Security numbers on tax returns, increased the workload for units responsible for reviewing returns for completeness and coding them for data entry, transcribing data, and correcting errors; (2) because most electronic filers still sent a paper signature document to IRS, the work done by paper processing staff was not entirely eliminated when taxpayers filed electronically; and (3) front-line paper processing staff spent increasing amounts of time on activities, including training, not specifically related to processing returns.

Future reductions in processing costs as a result of electronic filing are possible. In a March 2000 study prepared for IRS, a national consulting firm presented a range of cost-reduction estimates depending on changes in several variables, such as the number of returns filed electronically, and assuming several operational changes, such as making additional business forms available for electronic filing.² Using 1999 expenditures as the baseline, the consultant's annual cost-reduction estimates ranged from \$27 million to a "best case" of \$243 million starting in 2007. The best case estimate assumed that IRS would make several operational changes and that 80 percent of individual, 45 percent of business, and 30 percent of other returns would be filed electronically in 2007. However, the increase in electronic filing by individuals between 2000 and 2001 fell below IRS' goals. If this slower rate of increase continues, we projected that only about 60 percent of individual income tax returns would be filed electronically in 2007, which would lower the best case estimate to less than \$170 million, according to the consultant's report. Also, the consultant's report did not focus on potential increases in the type and

²IRS Cost of Processing Electronic Returns (Booz-Allen & Hamilton, Mar. 2000).

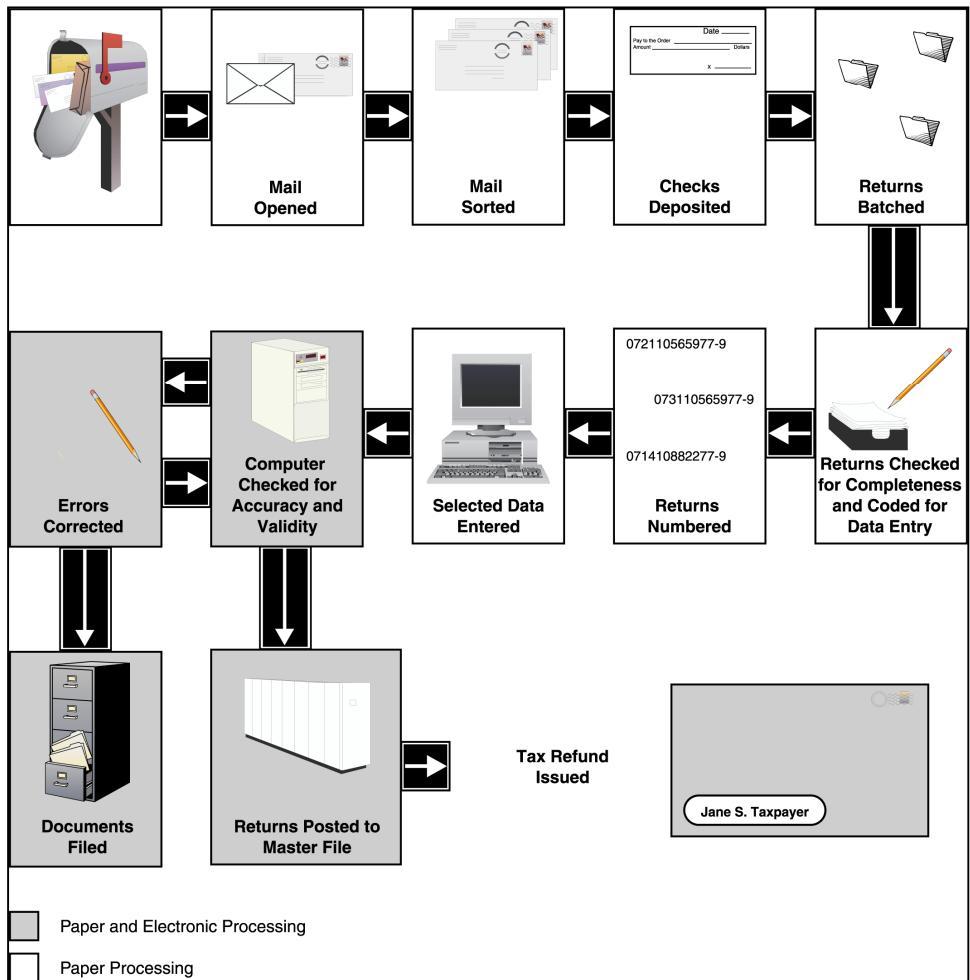
amount of data on paper returns that IRS would need to process due to tax law changes or increased compliance efforts. As a result, any reductions in processing costs would depend on the extent of any such increases.

In commenting on a draft of this report, the Commissioner said that the report provided useful explanations for the continued increase in submission processing costs, despite the increase in the number of electronically filed returns. At the Commissioner's suggestion, we revised the report to clarify the objective of the March 2000 consultant's study.

Background

IRS has 10 submission processing centers located throughout the country that are responsible for processing paper returns, 5 of which also process electronic returns. Electronic returns are relatively easy to process, while the processing of paper returns involves several additional steps, as shown in figure 1.

Figure 1: Processing Flowchart for Paper and Electronic Returns



Source: IRS.

The fewer steps involved in processing electronic returns rather than paper returns relate to a cost avoidance experienced by the IRS. In response to a question raised by the House Appropriations Committee in 2001, IRS estimated that 50 million individual income tax returns would be filed electronically in fiscal year 2002. IRS estimated that it would need 3,150 more full-time equivalent staff years if none of those returns were filed electronically. At IRS' estimate of \$36,300 per staff year, that would be a cost avoidance of \$114.3 million. Therefore, if no returns were filed electronically and using IRS' estimates, which we did not verify, IRS' fiscal

year 2002 budget request of \$615 million for submission processing would have increased to about \$729 million.³ The major focus of our review was on factors that worked against an even greater reduction in submission processing costs.

Scope and Methodology

To address our objectives, we interviewed IRS National Office officials and officials at 2 of the 10 submission processing centers—Atlanta and Cincinnati—to obtain their opinions about any factors that limited the impact of electronic filing on the amount of resources devoted to processing returns from fiscal years 1997 through 2000. We reviewed IRS documents and GAO reports that contained information related to these factors. We analyzed a report prepared for IRS by the consulting firm of Booz-Allen & Hamilton about future prospects for cost reductions in submission processing and obtained IRS officials' opinions on that subject. We performed our work between January and October 2001 in accordance with generally accepted government auditing standards. We discuss our scope and methodology in greater detail in appendix I.

Several Factors Limited the Impact of Electronic Filing on the Resources Devoted to Processing Returns

Several factors limited the impact of electronic filing on the resources devoted to processing returns from fiscal years 1997 through 2000.⁴ These factors fell into two broad categories—filing trends that partially offset the potential savings from increases in electronic filing and expanded demands on paper processing staff.

³IRS reorganized in fiscal year 2001. In doing so, the activities included in major budget categories also changed. As a result, comparisons cannot be made between IRS' budget for submission processing for fiscal years 1997-2000 and fiscal years 2001-2002 because the activities included in the budget for submission processing in fiscal years 2001 and 2002 are different than those included in prior fiscal years.

⁴Throughout the remainder of the report, we refer to these timeframes as years 1997 through 2000.

Potential Savings From Increase in Electronic Filing Partially Offset by Other Filing Trends

Even though the number of electronic returns filed from 1997 through 2000 increased, the potential savings from that increase were partially offset by the following filing trends:

- The increase in electronically filed returns was partially offset by an increase in total returns filed.
- The number of the most complex individual income tax returns filed on paper—standard Form 1040s—essentially stayed the same.
- The number of paper individual income tax returns received by IRS during the peak filing period stayed relatively the same from 1997 through 2000, and peak processing needs drive the resources needed to process individual paper returns.

Increase in Electronically Filed Returns Partially Offset by Increase in Total Returns Filed

About 17.9 million more individual and business tax returns were filed electronically in 2000 than in 1997. However, as shown in table 1, because of an overall increase in the total number of returns filed from 1997 through 2000, the net decline in paper returns over that period was much less than the 17.9 million net increase in electronic filings. Thus, the increase in electronic returns had less of an impact on processing costs than might have been expected because any savings from that increase would be partially offset by the costs to process the overall increase in returns filed.

Table 1: Individual and Business Returns Filed From 1997 Through 2000

Numbers in thousands						
Fiscal year	Type of return	Total paper	Percent paper	Total electronic	Percent electronic	Total returns
1997	Individual	152,657		19,136		171,793
	Business	41,808		3,785		45,593
	Total	194,465	89.5	22,921	10.5	217,386
1998	Individual	151,273		24,620		175,893
	Business	40,125		4,808		44,933
	Total	191,398	86.7	29,428	13.3	220,826
1999	Individual	148,216		29,387		177,603
	Business	41,815		4,986		46,801
	Total	190,031	84.7	34,373	15.3	224,404
2000	Individual	145,140		35,500		180,640
	Business	42,293		5,358		47,651
	Total	187,433	82.1	40,858	17.9	228,291
Change from 1997-2000		-7,032		17,937		10,905

Source: Generated by GAO based on data from IRS' Office of Research.

Number of Most Complex Paper Returns Essentially Stayed the Same

From 1997 through 2000, the number of complex individual returns filed on paper essentially remained the same. The complexity of a return varies according to the form on which it is filed. Complexity is determined by the number of lines of data that need to be entered on a form. According to IRS submission processing officials, the standard Form 1040 is the most complex. Complexity then decreases from the Form 1040 to the Form 1040A, and finally to the Form 1040EZ. The more complex a return, the longer it takes to process and the greater the processing costs. For example, according to data developed for IRS by a consulting firm for fiscal year 1999, the average direct labor cost to process a Form 1040 filed on paper was \$1.93 compared to \$1.50 to process a paper 1040A and \$1.01 to process a paper 1040EZ.⁵

As shown in table 2, the number of Form 1040s filed on paper only decreased by about 1 percent from 1997 through 2000, with the only decrease occurring between 1999 and 2000. The reductions in paper 1040As and 1040EZs were much larger during the years covered by our study—15 and 23 percent, respectively.

Table 2: Numbers of Form 1040, 1040A, and 1040EZ Filed on Paper From 1997 Through 2000

Form	Numbers in thousands				Percentage reduction 1997 through 2000
	FY1997	FY1998	FY1999	FY2000	
1040	59,356	59,567	59,939	58,894	1
1040A	17,319	16,331	15,572	14,738	15
1040EZ	14,449	12,742	11,826	11,158	23

Note: The time period covered by the IRS study was generally the beginning of January through the end of August.

Source: Generated by GAO based on IRS' Taxpayer Usage Study.

Any reductions in processing costs that IRS may have been able to realize as more taxpayers filed electronically depended, in great part, on the cost of processing those same returns filed on paper. IRS would have been able to reduce costs more if a greater number of taxpayers who were filing the more complex (and thus more costly to process) returns on paper had started filing electronically.

⁵Booz-Allen & Hamilton, Mar. 2000. These figures include fringe benefits.

Volume of Returns Received During Peak Filing Period Drives Resource Needs; Peak Volume Stayed About the Same From 1997 Through 2000

Another filing trend that limited the impact of electronic filing on processing costs was the increase in the number of paper returns filed by individuals during the peak filing period—the 2 weeks of the year when the most individual income tax returns are filed. The peak filing period for paper returns filed by individuals is mid-April. Business returns do not experience the same peak phenomenon. Businesses have various fiscal years, which affect their filing period. In addition, many business returns must be filed quarterly.

As shown in table 3, while the overall number of individual returns filed on paper decreased from 1997 through 2000, the number of paper returns⁶ filed during the peak period stayed relatively the same.⁷

Table 3: Individual Paper Returns Filed During the Peak Filing Period From 1997 Through 2000

Numbers in thousands			
Year	Total individual returns filed	Total paper returns	Total paper returns filed during peak period
1997	113,345	94,302	32,154
1998	115,222	90,789	32,192
1999	117,719	88,611	31,936
2000	120,040	84,959	32,320

Source: Generated by GAO based on data from IRS' Office of Research.

The number of paper individual returns received during the peak filing period drives the amount of resources needed to process individual paper returns. According to the Director of Submission Processing, when Submission Processing determines its resource needs, the first priority is the resources (including staff, equipment, and space) needed during the peak period. The Director added that, all things considered, if the number of individual paper returns received during the peak period increases while the total number of paper returns received during the entire year decreases, the increase during the peak period would have more of an impact on submission processing resources than would the overall decrease in paper receipts.

⁶The number of individual returns differs from those in table 1 because table 3 does not include forms such as 1040SS (Self-Employment Tax Return) and 1040NR (Nonresident Alien Income Tax Return).

⁷The number of individual paper returns filed during the peak period increased to over 33.6 million returns during the 2001 peak period.

IRS' goal of improving business results also directly affects the resources needed during the peak filing period. To help achieve this goal, in 2000, 85 percent of refund checks for paper returns were to be processed within 40 days. Doing so also contributes to IRS' goal of improving taxpayer satisfaction. Thus, to meet these goals, IRS has to ensure that there are enough resources to process the increased number of peak period returns within this time frame.

Demands Placed on Paper Processing Staff Were Expanded

Another factor that limited the impact of electronic filing on the resources devoted to paper processing was the increase in demands placed on paper processing staff from 1997 through 2000. These increased demands included the following:

- Numerous processing changes increased the workload for units responsible for (a) reviewing returns for completeness and coding them for data entry, (b) transcribing data, and (c) correcting errors.
- Because most electronic filers submitted a paper signature document, the work done by paper processing staff was not totally eliminated when taxpayers filed electronically and the volume of that work increased as electronic filing increased.
- Front-line employees spent increasing amounts of time on activities, including training, not specifically related to processing returns.

Paper Processing Staff's Workload Increased

Numerous changes were made in the processing of returns from 1997 through 2000, which according to IRS officials, resulted in an increased workload. For paper processing staff, these changes generally increased the

- amount of time spent reviewing returns and coding them for data entry,
- number of keystrokes entered, and
- number of IRS and taxpayer errors to be corrected.

Table 4 illustrates the estimated effects of some of these changes according to IRS' data.

Table 4: Estimated Effects of Certain Processing Changes on Workload

Type of change	Estimated number of returns affected	Increase in seconds needed to review and code each return	Increase in keystrokes per return	Increase in number of returns with IRS or taxpayer errors needing correction
Validate secondary Social Security numbers ^a	41,600,000	1	10	3,100,000
Validate eligibility for child care credit	5,300,000	4	25	400,000
Transcribe student loan interest data	5,000,000	1	4	100,000
Transcribe data on education credits	4,000,000	2	4	200,000

Note: Changes made from 1997 through 2000.

^aIn the case of a joint tax return, the person whose name appears first on the return is considered the primary taxpayer. The other person is considered the secondary taxpayer.

Source: IRS data.

Some processing changes, such as the validation of secondary Social Security numbers, were made to help ensure compliance with the tax law. Other changes stemmed from changes in the tax law that established new credits and deductions for which IRS had to enter data into its computer system.

Although the numbers of additional seconds and keystrokes cited in table 4 for any one change are small, the overall effect of these processing changes, considering the number of returns involved, is to increase the number of staff years needed to process returns. For example, the additional second needed to review and code 41.6 million returns for secondary Social Security number validation equates to about 11,556 hours or (on the basis of 2,088 hours per staff year) 5.5 staff years. Similarly, a total of about 584.5 million additional keystrokes would have had to be made to process the four changes in table 4, which, we roughly estimated using IRS data on average keystrokes per hour,⁸ would consume at least 78,000 additional hours or 37.4 staff years at a cost of almost \$1.4 million.⁹ Although these changes in workload may not be of great

⁸IRS data on keystrokes per hour varies by the type of 1040 form being processed and by year. We developed our estimate using the average keystrokes per hour for the type of form that took the least amount of time to process in 2000.

⁹Based on IRS' estimate of \$36,300 per staff year in fiscal year 2002.

magnitude, they required additional resources that offset some of the potential savings from electronic filing.

The workload of error correction staff can also be affected by changes in the accuracy of work done by other processing staff. In that regard, the accuracy of staff who reviewed and coded tax returns for transcription increased from 95 percent in 1997 to 96.6 percent in 2000, while the accuracy of data transcribers decreased from 94.7 percent to 93.9 percent. We do not know how much, if at all, the volume of error correction work actually changed as a net result of these increases and decreases in accuracy.

The increase in responsibilities can also affect the staff's productivity. Using IRS information on average keystrokes per hour for various tax forms as a measure of data transcribers' productivity, table 5 shows that there was a general decline in productivity in 1999, which is when transcribers began using a new computer system, and a general improvement in productivity in 2000.¹⁰ For example, IRS data for Other-Than-Full-Paid Form 1040s showed that the average keystrokes per hour went from 7,503 in 1997 to 7,250 in 1998 and 6,802 in 1999 before rising to 7,108 in 2000.¹¹

Table 5: Differences in Data Transcribers' Productivity (average keystrokes per hour)

Number of forms by type	Differences	Number of forms		
		1998 compared with 1997	1999 compared with 1998	2000 compared with 1999
24 business forms ^a	Productivity decreased	8	17	3
	Productivity increased	16	7	21
13 individual forms	Productivity decreased	5	13	2
	Productivity increased	8	0	11

^aWhen developing these data, in some cases IRS developed average keystrokes per hour for specific business forms and in other cases, combined two or more business forms. When forms were combined, they were counted as one form in this table.

Source: GAO's analysis of IRS data.

¹⁰We did not have data that could be used to measure changes in the productivity of staff who reviewed and coded returns for transcription.

¹¹Other-Than-Full-Paid returns are returns that involve either a refund or an unpaid liability and account for the majority of Form 1040s processed.

Submission Processing officials said that many factors affected accuracy and productivity and that it would be difficult to determine specifically what caused them to decrease. However, they believed that the learning curve associated with using a new computer system in 1999 was probably the major contributing factor to the decrease in data transcribers' productivity. They added that there has been high turnover in the Submission Processing Centers for the past few years due to the availability of higher paying jobs elsewhere within IRS or in the private sector. As a result, they have less experienced staff, which may have contributed to lower accuracy and productivity rates.

Work Done by Paper Processing Staff Not Totally Eliminated by Electronic Filing

During the years covered by our study, electronic filing was not entirely paperless. Most electronic filers continued to submit a paper signature document, even though in 1999, IRS began testing electronic options to replace the document. Thus, any savings IRS realized when taxpayers switched to electronic filing were partially offset by the costs incurred in processing the increase in the volume of paper signature documents that resulted from the increase in electronic filing.

Before 1999, individual taxpayers who filed electronically had to submit a paper signature document that was processed by the staff who processed paper returns. Beginning in 1999, IRS provided two options that could be used in place of submitting a paper signature document.¹² In 2000, about 6.8 million (or about 19 percent) of the 35.4 million taxpayers who filed their individual income tax returns electronically used one of those options. However, that meant that IRS still had to process about 28.6 million paper signature documents. According to a March 2000 study prepared for IRS by a consulting firm, it cost IRS \$0.26 in direct labor costs to process each paper signature document in 1999. Assuming that same rate in 2000, it would have cost IRS about \$7.4 million in labor costs to process the 28.6 million signature documents.

Increased Time Spent by Front-Line Employees on Nonprocessing Activities

Front-line paper processing employees spent greater amounts of their time on activities not specifically related to processing returns in fiscal year 2000 than they did in 1997. The Submission Processing Director and the Processing Division Branch Chiefs at the Atlanta and Cincinnati

¹²These options allowed a taxpayer to use electronic signatures in the form of a personal identification number or to file on-line using an E-file Customer Number. IRS tested these options in 1999 and expanded both in 2000. In 2001, IRS discontinued the use of the E-file Customer Number. Instead, almost all electronic filers were eligible to sign their returns using a self-selected personal identification number.

Submission Processing Centers said that personnel were spending more time (1) in required training not related to processing returns and (2) on required activities related to the Employee Satisfaction Survey.¹³ Some of the required training, such as training about the circumstances under which IRS employees can be charged with misconduct and terminated, was provided in order to apprise staff of new statutory requirements. IRS plans to use results from the Employee Satisfaction Survey to improve operations. According to the Branch Chiefs, these activities, while important, reduced the amount of time that employees were able to devote to processing returns.

According to data in IRS' Work, Planning, and Control System, the amount of time paper processing staff spent on all training, including training related to processing returns, and on actions related to the Employee Satisfaction Survey increased from fiscal years 1997 through 2000. The percentage of time spent on these activities grew from 7.8 percent to 9.9 percent. Because IRS records did not separately identify all training related to processing and nonprocessing activities, it was not possible to determine the change in the amount of time spent in nonprocessing-related training. Data in the Work, Planning, and Control System also showed that the number of hours submission processing staff spent on activities related to the Employee Satisfaction Survey increased from about 12,000 in fiscal year 1997 to almost 96,000 in fiscal year 2000.

According to the Submission Processing Director, finding the time to spend on nonprocessing related training and the Employee Satisfaction Survey, both of which were required, was more difficult for Submission Processing than other units in IRS. This was because some units could absorb these activities by doing less direct work, such as opening fewer collection cases. Submission Processing, on the other hand, could not process fewer returns, so any additional required activities meant working more overtime, keeping seasonal employees longer, or hiring more employees than originally planned, resulting in an increase in costs. The Director added that the Employee Satisfaction Survey was completed during the peak filing period to help ensure that IRS obtained the views of seasonal staff.

¹³The training courses unrelated to processing returns covered a variety of issues, such as preventing sexual harassment, the circumstances under which IRS employees can be charged with misconduct and terminated, ethics, and security awareness. Activities related to the Employee Satisfaction Survey included not only participating in the survey but also discussing the results and ideas for improvements.

Future Cost Reductions Hinge on Increases in Electronic Filing and Changes in Processing Operations

Consulting Firm's Estimates of Potential Processing Cost Reductions

According to a report prepared for IRS by a national consulting firm, future reductions in processing costs are possible, with the amount of any reduction dependent on the nature and extent of future increases in the number of returns filed electronically and changes in submission processing's operations. Whether these reductions are realized will depend not only on the actual number of returns filed electronically and the extent to which different operational changes are implemented, but also on the extent of any changes in the workload of paper processing staff due to tax law changes or increased IRS compliance efforts.

In a March 2000 report prepared for IRS, the national consulting firm of Booz-Allen & Hamilton analyzed how various scenarios might affect IRS' processing costs starting in 2007. The firm developed eight scenarios that involved a growth in volume of returns and a growth in electronic filing of individual, business, and other types of forms, as well as several operational changes, such as making additional business forms available for electronic filing and consolidating submission processing centers.¹⁴ The firm also developed four cost-reduction estimates for each scenario based on differing percentages of electronic filing for individual, business, and other returns.¹⁵ Those cost-reduction estimates ranged from \$27 million to \$243 million. Figure 2 shows that the firm's estimates when using the highest electronic filing projections—80 percent for individual returns, 45 percent for business returns, and 30 percent for other returns—ranged from \$104 million to \$243 million.¹⁶

¹⁴The firm also developed four scenarios that did not include a growth in volume and a growth in electronic filing of individual, business, and other types of forms.

¹⁵The electronic filing percentages used were 40, 50, 65, and 80 for individual returns; 17, 25, 35, and 45 for business returns; and 5, 10, 20, and 30 for other returns.

¹⁶The cost reductions are based on a \$644 million baseline for fiscal year 1999.

Figure 2: Reductions in Processing Costs Based on Various Scenarios Involving Increases in Electronic Filing and Changes in Processing Operations

	Scenario									
Scenario	Volume Growth ^a	Individual Growth ^b	Business Growth ^c	Other Growth ^d	No Signature Document ^e	Additional Capabilities ^f	Site Consolidation ^g	Eliminate Capabilities ^h	Total Cost (Millions) (Millions)	Total Cost Reduction (% Baseline)
Baseline ⁱ									\$644	
1	●	●	●	●					\$540	\$104 16%
2	●	●	●	●			●		\$519	\$125 19%
3	●	●	●	●		●			\$517	\$127 20%
4	●	●	●	●	●				\$494	\$150 23%
5	●	●	●	●	●	●			\$471	\$173 27%
6	●	●	●	●	●		●		\$461	\$183 28%
7	●	●	●	●	●	●	●		\$428	\$216 34%
8	●	●	●	●	●	●	●	●	\$401	\$243 38%

^aBased on IRS' estimates.

^b80 percent of individual returns filed electronically.

^c45 percent of business returns filed electronically.

^d30 percent of supplemental and information returns filed electronically.

^eEliminate paper signature document.

^fAdditional business forms available electronically.

^gConsolidate the number of submission processing centers.

^hEliminate scanning and filing by telephone.

ⁱFiscal year 1999 expenditures used to develop baseline.

Source: IRS Cost of Processing Electronic Tax Returns (Booz-Allen & Hamilton, Mar. 2000) and GAO's computations.

The estimates in figure 2 assume that IRS will meet its goal of having 80 percent of all individual income tax returns filed electronically by 2007. However, our assessment of IRS' 2001 tax filing season in response to another request from this Subcommittee showed that (1) about 31 percent of individual income tax returns were filed electronically in 2001 (through October 26, 2001) and (2) fewer individuals filed electronically in 2001 than IRS had projected (40 million filed vs. 42 million projected).¹⁷ With 2001 as a starting point and assuming that the total number of individual income tax returns filed and the number of such returns filed electronically each continue to grow at the same annual rate as achieved between 2000 and 2001 (1.85 percent and 13.7 percent, respectively), we projected that only about 60 percent of individual income tax returns would be filed electronically in 2007.¹⁸ Using the estimates in the consultant's March 2000 report for a 65-percent level of individual electronic filing, the cost reductions would range from \$74 million to \$170 million annually in 2007, or about 30 percent less than at the 80-percent electronic filing level for individuals.

Certain Factors Could Alter the Consultant's Projections

The consultant's report focused on reductions that could be realized by making specific changes related to processing returns and not on potential increases in the type and amount of data on paper returns that IRS would need to process due to tax law changes or enhanced compliance efforts.¹⁹ Consequently, any reductions in overall processing costs would depend on the level of any such increases.

In that regard, IRS made at least one significant change in submission processing's workload in 2001 that increased costs. IRS' 2001 budget included 378 additional full-time equivalent staff years in submission processing for transcribing Schedule K-1s (Beneficiary's, Partner's, or Shareholder's Share of Income, Deductions, Credits, etc.). IRS plans to compare the transcribed K-1 information to that reported on the tax

¹⁷*Tax Administration: Assessment of IRS' 2001 Tax Filing Season* ([GAO-02-144](#), Dec. 21, 2001).

¹⁸We did not do the work necessary to make similar projections for business returns and other returns.

¹⁹Examples of changes included increasing the number of business forms available that could be filed electronically and consolidating submission processing centers.

returns filed by beneficiaries, partners, and shareholders to determine if income was accurately reported.

The Director of Submission Processing told us that the cost reductions in the consultant's study may also be overstated because the study did not consider the resources needed to process returns during the peak filing period. The consulting firm official responsible for developing the data in the study said that the maximum cost reductions included in the study would not be affected by peak filing period resource needs, because the reductions were based on the assumption that 80 percent of individual taxpayers would file electronically. To achieve that level of electronic filing, the number of returns filed on paper would have to decrease significantly from the fiscal year 2000 levels previously described in this report. Once this happens, fewer resources would be needed to process paper returns during the peak filing period. The official added that at some lower percentage of electronic filing, peak period filing needs would affect possible cost reductions, but he did not know what that level would be.

Agency Comments and Our Evaluation

The Commissioner of Internal Revenue provided written comments on a draft of this report in a December 17, 2001, letter which is reprinted in appendix II. The Commissioner said that our report provided useful explanations for the continued increase in submission processing costs, despite the increase in the number of electronically filed returns. At his suggestion, we revised the report to clarify the objective of the March 2000 consultant's study.

The Commissioner also suggested that we revise the report to acknowledge the steps IRS has taken to reduce the processing costs associated with electronic filing, specifically with respect to the paper signature document. Our report recognizes the steps IRS has taken to enable electronic filers to sign their returns electronically. However, most electronic returns were still filed with paper signature documents. Of the about 40 million returns filed electronically in 2001, about 9 million were filed using an electronic signature. The other about 31 million returns were filed using a paper signature document—an increase of about 2.4 million returns compared to 2000. Using the direct labor cost included in the March 2000 consultant's study for processing paper signature documents—\$0.26 per document—it cost IRS about \$624,000 more in 2001 than in 2000 to process these documents.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this report. At that time, we will send copies of this report to the Chairmen and Ranking Minority Members of the Senate Committee on Finance and the House Committee on Ways and Means and to the Ranking Minority Member of this Subcommittee. We are also sending copies to the Secretary of the Treasury; the Commissioner of Internal Revenue; the Director, Office of Management and Budget; and other interested parties. We will also make copies available to others on request.

This report was prepared under the direction of David J. Attianese, Assistant Director. If you have any questions about this report, please contact me or Mr. Attianese on (202) 512-9110. Key contributors to this report were Julie Schneiberg, Margaret Skiba, and Shellee Soliday.

Sincerely yours,

A handwritten signature in black ink that reads "Michael Brostek". The signature is fluid and cursive, with "Michael" on the top line and "Brostek" on the bottom line.

Michael Brostek
Director, Tax Issues

Appendix I: Objectives, Scope, and Methodology

Our first objective was to determine what factors, if any, limited the impact of electronic filing on the resources devoted to processing paper returns. To address this objective, we interviewed several Internal Revenue Service (IRS) officials responsible for submission processing and electronic tax administration. We also visited 2 of IRS' 10 submission processing centers, including 1 that had an electronic filing unit—Cincinnati—and 1 that did not have an electronic filing unit—Atlanta. At both centers, we interviewed the Center Directors and several Processing and Post Processing Division officials. These divisions have primary responsibility for processing returns. At Cincinnati, we also interviewed the Lead Tax Examiner in the Electronic Filing Unit to obtain details about the Unit's role in electronic return processing.

We selected Cincinnati from among the five centers that had an electronic filing unit because Submission Processing's Monitoring Section was located there and officials would be able to provide information related to processing both paper and electronic returns.¹ We selected Atlanta from among the five centers that did not have an electronic filing unit because it was convenient to our audit staff. Because these two centers were judgmentally selected, our results cannot be projected to all 10 centers. However, the Director of Submission Processing said that the opinions provided by officials at these two centers would be representative of the opinions that would be provided by officials at the other eight centers.

To further address the first objective, we analyzed several studies prepared either by or for IRS, including a consulting firm's study of the costs to process electronic returns.² We analyzed available IRS statistics related to several topics, including training, filings by type of return, the number of keystrokes associated with new data to be entered into the computer by data transcribers, and average keystrokes per hour. We also reviewed our past reports to obtain information about the accuracy of work done by paper processing staff.

¹The Monitoring Section is responsible for determining if programs are being executed according to plan. For example, they compare planned work to actual work to determine if changes need to be made in work schedules. Before IRS' reorganization, which became effective in October 2000, this section also was responsible for determining if changes were needed in the budgets for submission processing centers.

²Booz-Allen & Hamilton, Mar. 2000.

Our work on the first objective focused on fiscal years 1997 through 2000. We selected this 4-year period because (1) at the time we began our review, fiscal year 2000 was the last complete year for which data were available and (2) we wanted data for enough years before 2000 to be able to analyze trends. We decided that a total of 4 years would provide sufficient trend data. We included fiscal year 2001 data about the peak filing period and the number of individual returns filed electronically because it was readily available.

Our second objective was to determine the prospects for future reductions in submission processing costs. We interviewed the Director of Submission Processing, reviewed the previously referred to report on costs to process electronic returns, and interviewed the consulting firm official who had responsibility for developing the data in the report. This report presented eight scenarios involving a growth in the volume of returns filed and a growth in electronic filing and included estimates of the cost reductions that IRS would realize under each scenario. The scenarios included different combinations of several variables, including increases in electronic filing by individual or business taxpayers, elimination of the paper signature document, and increases in the number of business forms that can be filed electronically. We also reviewed information that IRS provided to the House Appropriations Committee in June 2001 on the number of additional full-time equivalent staff years IRS would need to process returns if all returns were filed on paper.

We performed our work between January and October 2001 in accordance with generally accepted government auditing standards. We obtained written comments from the Commissioner of Internal Revenue on a draft of this report. The comments are discussed near the end of this report and are reprinted in appendix II.

Appendix II: Comments From the Internal Revenue Service


DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

COMMISSIONER

December 17, 2001

Mr. Michael Brostek
Director, Tax Issues
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Brostek:

Your report, "Tax Administration: Several Factors Limited the Impact of Electronic Filing on Processing Cost; Future Cost Reductions Are Possible," provides useful explanations for the continued increase in submission processing costs, despite the increase in electronically filed returns. I would like to add comments concerning other aspects of this report.

First, I think that the report should clarify that the purpose of the March 2000 report on "IRS Cost of Processing Electronic Returns," was to determine the cost impact of various e-file options, not to estimate actual savings or to identify submission processing cost leading to 2007 and the 80 percent mandate.

Second, I think that the report should acknowledge the steps that IRS takes to reduce the processing costs associated with electronic filing, specifically the signature *jurat*. Since 1999, the IRS has worked toward eliminating the requirement for filing a separate signature document. In 2000, we tested the use of a Personal Identification Number (PIN) code as the taxpayer's signature, eliminating the need to file the paper *jurat*. In 2001, we extended the PIN option to all taxpayers. Approximately 9 million taxpayers participated in the Self-Select PIN Program, which enabled them to select their own five-digit code, while providing the IRS with two pieces of information from their previous tax return.

We continue to move toward paperless returns, and to increase taxpayer awareness of the comparative ease, speed and convenience of e-filing. We are adding helpful information on the Self-Select PIN Program to the 1040 Series Instruction Booklet, to publications available to individual taxpayers and tax professionals, and we are mailing 23 million Self-Select PIN Postcards to taxpayers nationwide.

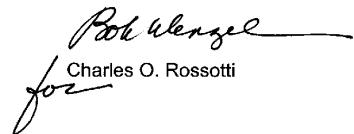
For 2002, we are opening e-file eligibility to more than 99 percent of taxpayers. By making available the remaining 29 forms and schedules, we could add 3.8 million new e-filers. Preparers will be able to offer electronic filing to all of their customers by 2002.

As more taxpayers discover and trust *e-file*, their interaction with the IRS will become more pleasant, less frequent and more economical.

We want to offer taxpayers and their representatives the advantages inherent in conducting their interactions with the IRS electronically, thereby reducing the burden on filers and operating cost-efficiently.

If you have questions or comments, please call Floyd Williams, Director, Legislative Affairs at (202) 622-3720.

Sincerely,


Charles O. Rossotti

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